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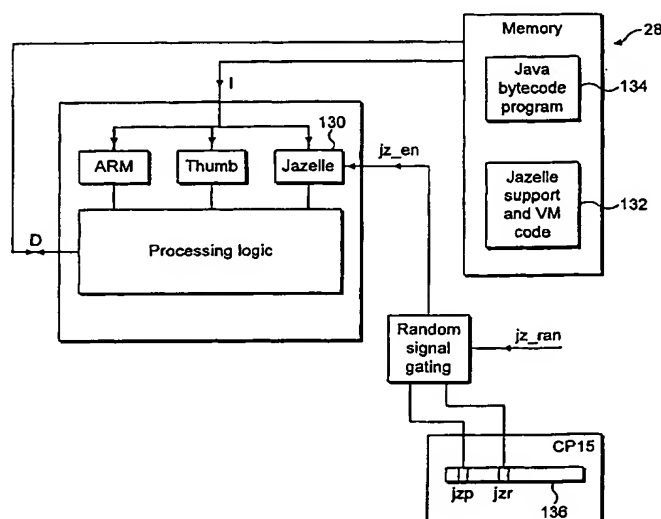
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(54) Title: **PROCESSING ACTIVITY MASKING IN A DATA PROCESSING SYSTEM**



(57) **Abstract:** Apparatus for processing data under control of data processing instructions specifying data processing operations, said apparatus comprising: a first execution mechanism operable to execute a first set of data processing instructions; a second execution mechanism operable to execute a second set of data processing instructions, said first set of data processing instructions overlapping with said second set of data processing instructions such that one or more data processing instructions are executable by either said first execution mechanism or said second execution mechanism; and an execution mechanism selector operable to pseudo randomly selected either said first execution mechanism or said second execution mechanism to execute one or more data processing instructions that are executable by either said first execution mechanism or said second execution mechanism.

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 A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 G06F1/00

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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SONG S P ET AL: "THE POWER PC 604 RISC MICROPROCESSOR" IEEE MICRO, IEEE INC. NEW YORK, US, vol. 14, no. 5, 1 October 1994 (1994-10-01), pages 8-17, XP000476676 ISSN: 0272-1732 page 8, left-hand column, paragraph 2 - right-hand column, last paragraph page 13; figure 4 page 12, left-hand column, paragraph 3 - right-hand column, last paragraph -----	1-3,5, 11,12, 16-18, 20,26,27
A	WO 00/39660 A (UGON MICHEL ; BULL CP8 (FR); GRESSUS YVON (FR); SIEGELIN CHRISTOPH (FR) 6 July 2000 (2000-07-06) the whole document ----- -/--	1

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2002/066003 A1 (ROSE ANDREW CHRISTOPHER ET AL) 30 May 2002 (2002-05-30) column 2, paragraph 9 - paragraph 10 column 12, paragraph 86 -----	1-30
A	US 6 298 434 B1 (LINDWER MENNO M) 2 October 2001 (2001-10-02) the whole document -----	1-30
A	US 6 332 215 B1 (RANGANATH V R ET AL) 18 December 2001 (2001-12-18) the whole document -----	1-30

INTERNATIONAL SEARCH REPORT

Information on patent family members

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PCT/GB 03/04313

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0039660 A	06-07-2000	FR 2787900 A1	30-06-2000
		BR 9908268 A	24-10-2000
		CN 1124533 B	15-10-2003
		EP 1057094 A1	06-12-2000
		WO 0039660 A1	06-07-2000
		JP 2002533825 T	08-10-2002
		TW 463101 B	11-11-2001
US 2002066003 A1	30-05-2002	GB 2367653 A	10-04-2002
		CN 1434938 T	06-08-2003
		EP 1323032 A1	02-07-2003
		GB 2367658 A	10-04-2002
		WO 0229555 A1	11-04-2002
		JP 2002116908 A	19-04-2002
		JP 2004511041 T	08-04-2004
		US 2002069402 A1	06-06-2002
		US 2002108103 A1	08-08-2002
US 6298434 B1	02-10-2001	DE 69820027 D1	08-01-2004
		EP 1359501 A2	05-11-2003
		EP 0950216 A2	20-10-1999
		EP 0941508 A1	15-09-1999
		EP 1019794 A2	19-07-2000
		WO 9918484 A2	15-04-1999
		WO 9918485 A2	15-04-1999
		WO 9918486 A2	15-04-1999
		JP 2001508907 T	03-07-2001
		JP 2001508908 T	03-07-2001
		JP 2001508909 T	03-07-2001
		US 2002129225 A1	12-09-2002
		US 6292883 B1	18-09-2001
		US 6349377 B1	19-02-2002
US 6332215 B1	18-12-2001	AU 2165400 A	26-06-2000
		EP 1157323 A2	28-11-2001
		JP 2002532772 T	02-10-2002
		WO 0034844 A2	15-06-2000
		US 6338160 B1	08-01-2002
		US 2002019976 A1	14-02-2002
		US 2002066083 A1	30-05-2002